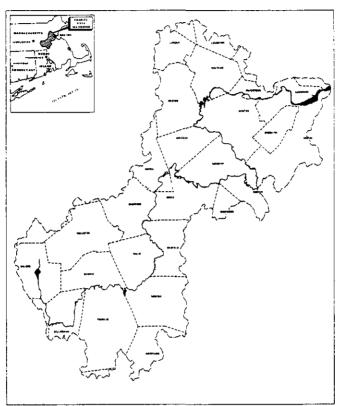
WATER RESOURCES DEVELOPMENT PROJECT CHARLES RIVER WATERSHED



NATURAL VALLEY STORAGE AREAS

MASSACHUSETTS

DESIGN MEMORANDUM NO. 3 C



REAL ESTATE

DEPARTMENT OF THE ARMY

NEW ENGLAND DIVISION, CORPS OF ENGINEERS

WALTHAM, MASS.

JUNE 1979

DISPOSITION FORM

For use of this form, see AR 340-15; the proponent agency is The Adjutant General's Office.

REPERENCE OR OFFICE SYMBOL

TO

NEDRE-A

Charles River Watershed, Natural Valley Storage Areas, Massachusetts, Design Memorandum No. 3C, Real Estate

FROM

DATE

CMT 1

Chief, Real Estate Div.

Chief, Appraisal Br.

25 June 1979 Mr. Coke/src/581

- 1. The General Design Memorandum for the subject project was approved by OCE on 3 September 1976.
- 2. In accordance with ER 1110-2-1150, Paragraph 21 b. (2)(j) there is submitted herewith for review and approval Design Memorandum No. 3C, Real Estate, and separate formal Gross Appraisal. This is the fourth and final project report. It includes the total estimated real estate cost for the remaining three of the 17 Charles River Wateshed, Reservoir Areas (F, I, J).
- 3. Three previous reports were approved at OCE in December 1976, May 1978, and September 1978.
- 4. The estimated total land requirements covered under this report are approximately 369 acres in the Town of Sherborn and Holliston, Massachusetts, involving about 41 ownerships at an estimated cost of \$585,000.
- 5. It is recommended that this report to acquire said lands as authorized be approved, subject to possible changes and minor variations, as determined necessary prior to acquisition.

2 Incl

as

COKE

APPROVED subject to availability of funds.

M. S. PHILLIPS

Chief, Real Estate Division

M. S. Helligo

CF - Doyle w/o incl Avtges w/o incl Conv. w/o incl Appr. w/o incl P&C - w/incl

WATER RESOURCES DEVELOPMENT PROJECT

CHARLES RIVER WATERSHED NATURAL VALLEY STORAGE AREAS MASSACHUSETTS

DESIGN MEMORANDUM NO. 3C REAL ESTATE

JUNE 1979

DEPARTMENT OF THE ARMY
NEW ENGLAND DIVISION, CORPS OF ENGINEERS
WALTHAM, MASSACHUSETTS 02154

II

DESIGN MEMORANDUM REAL ESTATE

CHARLES RIVER WATERSHED NATURAL VALLEY STORAGE AREAS MASSACHUSETTS

JUNE 1979

This Real Estate Design Memorandum has been prepared in accordance with regulations set forth in ER405-2-150, dated 11 February 1966, as amended.

I hereby certify that I have examined the properties described and the estimates, as developed in this report, represent my unbiased judgment of the interests required, subject only to assumptions and limitations, as specifically set forth herein.

PREPARED BY:

GLENN R. BROCK

Appraiser

REVIEWED BY:

HARRY 6. THOMPSON Review Appraiser

APPROVAL AND CERTIFICATION

The undersigned herewith approves this Real Estate Design Memorandum and certifies that he has inspected the lands proposed for acquisition within the Project Area and comparable property in the vicinity and that data set forth herein is accurate and complete to the best of his knowledge.

WILLIAM R. COKE

Chief, Appraisal Branch

APPROVED FOR THE DIVISION ENGINEER:

Chief, Real Estate Division

WATER RESOURCES DEVELOPMENT PROJECT

CHARLES RIVER WATERSHED NATURAL VALLEY STORAGE AREAS MASSACHUSETTS

DESIGN MEMORANDA INDEX

| Number | | Scheduled Submission Date | Date Submitted | Date Approved |
|--------|--------------------------------------------------------------------------------|---------------------------------|-------------------|------------------|
| 1 | Hydrologic Analysis | Aug 76 | 4 Oct 76 | 11 Nov 76 |
| 2 | GDM - Phase I & Phase II Combined | July 76 | 29 Jul 76 | 3 Sept 76 |
| | Real Estate | | | |
| 3 | Priority 1 | Sep 76 | 21 Oct 76 | 3 Dec 76 |
| 3A | Priority 2 | Mar 78 | 19 May 78 | 31 May 78 |
| 3B | Priority 3 | Jun 78 | 21 Jul 78 | 7 Sep 78 |
| 3C | Priority 4 | Jun 79 | | |
| | Project Plan for Development of Recreation, Fish & Wildlife Resources | Sep 80 | | |

EXHIBITS

| CHARLES RIVER WATERSHED MAP | 3C-1 |
|----------------------------------------|------|
| PRIORITY GROUP IV, AREAS "F," "I," "J" | 3C-2 |
| AREA "F" SEGMENT MAP | 3C+3 |
| AREA "I" SEGMENT MAP | 3C-4 |
| AREA "J" SEGMENT MAP | 3C-5 |
| MASS, DIVISION OF WATER SUPPLY LETTER | 3C-6 |

T

DESIGN MEMORANDUM NO. 3C REAL ESTATE

CHARLES RIVER WATERSHED NATURAL VALLEY STORAGE AREAS MASSACHUSETTS

TABLE OF CONTENTS

| ITEM | | PAGE |
|------|------------------------------------------------------|------|
| 1 | PROJECT DESIGNATION AND AUTHORIZATION | 1 |
| 2 | SCOPE AND STATUS | 1 |
| 3 | HISTORY | 1 |
| 4 | PROJECT PURPOSE | 2 |
| 5 | LOCAL COOPERATION - ASSURANCES | 3 |
| 6 | PRIORITY GROUP NO. IV | 3 |
| 7 | PROJECT LAND REQUIREMENTS | 4 |
| 8 | ESTATES TO BE ACQUIRED | 5 |
| 9 | AREAS PROPOSED FOR ACQUISITION - PRIORITY - GROUP IV | 5 |
| | Areas "F," "I," "J" | |
| 10 | ZONING | 8 |
| 11 | ENVIRONMENTAL EVALUATION | 10 |
| 12 | WATER RIGHTS | 10 |
| 13 | MINERAL DEPOSITS AND CROPS | 10 |
| 14 | GOVERNMENT/MUNICIPAL-OWNED FACILITIES | 10 |
| 15 | PROTECTION AND ENHANCEMENT OF CULTURAL ENVIRONMENT | 10 |
| 16 | ESTIMATED TAX LOSS | 11 |
| 17 | MANAGEMENT OF THE WETLANDS | 12 |
| 18 | HIGHEST AND BEST USE | 12 |
| 19 | LAND COSTS | 12 |
| 20 | AQUISITION COSTS | 13 |
| 21 | RESERVATION BOUNDARY SURVEYS AND MARKINGS | 13 |
| 22 | RELOCATION ASSISTANCE | 14 |
| 23 | SEVERANCE DAMAGES | 14 |
| 24 | CONTINGENCIES | 14 |
| 25 | REAL ESTATE COSTS SUMMARY | 15 |
| 26 | LAND AQUISITION SCHEDULE | 15 |
| 27 | RELOCATIONS | 15 |
| 28 | TRACT REGISTER | 15 |
| 29 | CONCLUSIONS AND RECOMMENDATIONS | 16 |

1. PROJECT DESIGNATION AND AUTHORIZATION

This project is designated as Charles River Watershed, which was authorized by Water Resources Development Act of 1974, Section 2 of Public Law 93-251, dated 7 March 1974. The document of authorization, which is the basis for acquisition of the Natural Valley Storage Areas, reads in part as follows:

"CHARLES RIVER WATERSHED

The project for flood control and other purposes in the Charles River Watershed, Massachusetts: Report of the Chief of Engineers, dated December 6, 1972 . . ."

2. SCOPE AND STATUS

The magnitude of the project required four Real Estate Design Memoranda. Three reports were approved at OCE in December 1976, May 1978 and September 1978. This final project report is designated Design Memorandum No. 3C. It covers the real estate costs for the remaining three of the 17 Charles River Watershed reservoir areas. It will be approved by New England Division Real Estate Chief under authority of ER1110-2-1150 Par. 21b(2)(j) Page 17.

Since project inception, about 25 percent of the necessary lands have been acquired which involve 217 ownerships including 233 tracts, of which 146 were acquired by outright fee purchase and 71 by restrictive easement. Total acreage acquired is 1,701 acres, of which 1,054 were in fee and 647 acres by restrictive easement.

Appraisals for approximately 100 more tracts have been approved and negotiations with respective landowners are in process. Questionnaire comments returned by landowners concerning their dealings with the Corps have been mostly favorable.

HISTORY

In 1965 the Congress directed the U.S. Army Corps of Engineers to undertake a study of the resources of the Charles River Watershed with a particular emphasis on how to control flood damages in the urbanized lower watershed and head off any significant flood damages in the urbanized middle and upper watershed. A 1968 interim recommendation led to authorization of a new Charles River Dam near the mouth of the river in Boston Harbor. The dam is now completed and dedication ceremonies were conducted on 24 May 1978.

The reservoir created by this dam on the lower Charles River near Boston proper has a negligible effect on the middle and upper Natural Valley Storage areas, since its limit is the Watertown Dam. The new dam replaces the old Charles River Dam one-half mile upstream.

In 1972 the Corps issued its final report for the upper and middle watershed, which included a new direction in flood damage prevention. The studies showed that the marshes and swamps along the Charles River act to modify and desynchronize flood flows in a manner similar to a series of reservoirs, and protect downstream areas from serious damage. It was shown that the loss of these natural valley storage areas, through continued urbanization in the Charles River Watershed, could result in widespread downstream damages. Positive measures were found necessary to assure that future flood loss potential is kept to a minimum. It was recommended in the report that the Government provide for Federal acquisition and perpetual protection of 17 crucial natural valley storage areas, totaling about 8,500 acres of wetlands.

4. PROJECT PURPOSE

Of the methods available for flood damage prevention, Federal acquisition of regionally significant natural valley storage areas offers an economical and efficient approach to flood control. The land acquisition method provides for both outright fee purchase and restrictive easement interests to the United States, insuring the perpetual protection of 17 critical natural valley storage areas within the project. By nature it is a unique nonstructural project, being the first of its type to be implemented.

The plan is compatible and complementary to local and State flood acquisition projects. Continuing urbanization would displace the wetlands and without the storage they afford, flooding would become an increasingly serious problem. Therefore, the purpose of this land acquisition program is to preserve the marshes, swamps and wetlands in their present state as natural floodwater detention areas, needed to reduce future flood losses and to safeguard natural open space.

The United States Department of the Interior, Fish and Wildlife Service, commends and supports the U.S. Army Corps of Engineers for the plan of acquisition. Also, the Governor of the Commonwealth of Massachusetts has endorsed this natural valley storage plan. The Charles River Watershed Association is also supportive of the plan and is assisting in publicizing the project.

5. LOCAL COOPERATION - ASSURANCES

The Charles River Watershed Project in eastern Massachusetts provides for Federal acquisition of natural valley wetlands, principally for the benefit of downstream communities. The authorized project recommended that local interests will:

- a. Prevent modification or alteration of existing roadways, utilities, bridges, culverts and any other improvements that might affect the drainage characteristics of the natural storage areas;
- b. Adopt and enforce regulations to restrict development of flood plain lands;
- c. Operate and maintain the existing dams along the Charles River.

Agreements for local cooperation were forwarded to the Commonwealth of Massachusetts for signature prior to commencement of land acquistion, as required by Section 2 of Public Law 93-251 of 7 March 1974, in compliance with Section 221 of Public Law 91-611 on 31 December 1970. These assurances were executed by the Commonwealth of Massachusetts on 7 March 1977, after which the first public meeting was held and land acquisition began in Priority I, being Areas "G,"" H", "K" and "L."

Consent legislation was enacted by the Commonwealth of Massachusetts Acts and Resolves, Chapter 858, approved 23 December 1977. The Act granted the consent of the Commonwealth to the acquisition by the United States of land for the Charles River Natural Valley Storage Project. It also authorized the Water Resources Commission to establish encroachment lines and flood plain zones as required by the Assurance Agreement.

It further authorized the Department of Environmental Quality Engineering to issue or deny an order of conditions for placement of an obstruction or encroachment within the flood plain zone after the Water Resources Commission has established same.

6. PRIORITY GROUP NO. IV

Specifically set forth in this report are the area descriptions and the Real Estate Cost Summary of the last three of the 17 areas that make up Priority Group No. IV. They are identified as Areas "F", "I" and "J" in the Upper Charles Drainage Area, containing a total of about 369 acres in the towns of Sherborn and Holliston, Massachusetts. These areas have been designated as Segments 29, 30 and 31 of the project. The areas

are located about 25 miles southwest of Boston and are accessible by several primary highways. These areas were assigned last priority because of their location near the headwaters of the Charles and their relatively small holding capacity, when compared with the three other previously studied groups, which are presently being acquired. Areas "F", "I" and "J" contribute about four percent of the entire watershed area to be acquired. However, they comprise a vital component for the natural valley water impoundment. (Refer to Plate 3C-2)

7. PROJECT LAND REQUIREMENTS

The lands described within this report are similar in nature to lands described in the previous three reports. They consist of lowlands and wetlands on the banks of the Charles River and its tributaries.

Originally, about 500 owners and 8,500 acres of land were estimated to be involved in the project. However, refinement of the mapping process indicated an increase to about 600 owners and 9,030 acres. (Refer to plate 3C-1)

The guide taking lines for lands to be acquired have been delineated by using various elevations above mean sea level, based upon the 1955 flood level plus one foot or two feet, depending upon the topography of the individual area. Lands at or below these elevations for each area are designated for acquisition. The following guidelines will be observed in determining the extent of land acquisition:

- a. Acquisition will be by outright purchase and/or restrictive easements.
 - b. No improvements are to be taken.
- c. There will be no taking, which would leave a nonconforming lot, where partial takings are acquired.
- d. In general, small tracts below the guide taking line will not be acquired, the assumption being that such areas would not contribute significantly to the total project requirements.
- e. Borderline cases will be examined on an individual tract basis and a determination will be made on the following considerations; specific desires of the owner, the best interests of the Government, project requirements and sound real estate practices. For planning purposes these tracts are included for acquisition.

GUIDE TAKING ELEVATION JUSTIFICATION

The criteria for determining the guide taking elevations in Areas "F," "I" and "J" of the Charles River Watershed Natural Valley Storage areas is based on the following:

PERTINENT ELEVATIONS (Above Mean Sea Level)

| NVSA | 1955 <u>Flood</u> (Minimum Taking Line) | 1955 Flood + 1' or 2' (Maximum Taking Line) |
|--------------|--------------------------------------------|---------------------------------------------|
| "F" | 137 | 1391 |
| "I" | 134~ | 1351 |
| " J " | 164 | 1651 |

The elevation of the 1955 Flood of Record is comparable to the observed 1968 flood.

The elevations are used herein, as the guide taking line for this REDM and are the 1955 flood elevations plus one to two feet but not to exceed the Standard Project Flood. The final taking line shall be based upon sound real estate practices with consideration given to the amount of additional land to be acquired above the 1955 flood elevation.

8. ESTATES TO BE ACQUIRED

It is planned to acquire the majority of tracts for this project in fee simple to insure maximum protection and proper management of the wetland areas. However, in certain cases it may be in the best interests of the Government and the landowners to acquire a restrictive easement in lieu of outright purchase where the landowner has reason to retain fee title. Easements have already been acquired over many tracts and it is anticipated that acquisition of additional easements will occur. Recommendation by the New England Division to acquire restrictive easements was approved by OCE by 1st Indorsement dated 3 December 1976, REDM No. 3.

9. AREAS PROPOSED FOR ACQUISITION - PRIORITY - GROUP IV

AREA "F" - Sherborn, Middlesex County, Massachusetts (Plate 3C-3)

Area "F" consists of about 125 acres of lowland, including about 22 acres of wetland. The area is located near the

center of the town of Sherborn and is within an area bounded on the north by Washington Street (State Highway 16), on the west by Russet Hill Road, on the south by Goulding Street and on the east by Main Street (State Highway 27). The area consists of a large portion of the watershed, which flows into Sewall Brook, a tributary of the Charles River. The area is irregular in shape, extending in a north-south direction for about 0.8 of a mile with a maximum width of about 0.6 of a mile. The land cover is mostly mixed wood growth and some wet meadow. Zoning is for residential use and the proposed acquisition includes the rear portions of several improved properties. However, acquisition of these rear portions will not require the removal or relocation of any of these homes.

It is noted that the flood plain in Sherborn includes areas which lie at or below 125 msl and 25 feet each side of designated streams. The proposed Government's guide taking elevation in this area is 139' msl. Based on this criterion, the land in area "F" that is within the flood plain is that portion which lies within 25 feet on each side of the centerline of Sewall Brook for a short distance at the lower end of the area. Therefore, the proposed takings in this area are greater than the existing flood plain zoning.

It is estimated that there are 22 ownerships involved in the acquisition area.

AREA "I" - Sherborn, Middlesex County, Massachusetts (Plate 3C-4)

Area "I" is located in Sherborn about one mile south of Area "F". It is an irregularly shaped area, extending in a north-south direction with the southern boundary being the Middlesex and Norfolk County line. The area is about 1.50 miles long and about 0.50 miles wide at the widest point.

The area consists of approximately 133 acres of lowland, including about 20 acres of wetland. The predominant cover is mixed wood growth. Zoning is for residential use. A parcel of land at the southern end of the area and lying west of Bogastow Brook has been platted and is known as Bogastow Valey. There are several new houses in the vicinity, but as of this date there are no houses on lots in the project.

Sparhawk Road, which leads to the area from the east (Bullard Street), is a private road.

There are no public roads crossing this area. The area is bisected by the Algonquin Gas transmission line. Like Area "F"

the only part of this area that falls within the flood plain is that portion which lies within 25 feet on each side of the centerline of Bogastow Brook. It is estimated there are eight owners involved in the acquisition area.

AREA "J" - Holliston and Sherborn, Middlesex County, Massachusetts (Plate 3C-5)

This is an area of about 111 acres of lowlands including about 30 acres of wetland along Dopping Brook. The area extends from Brook Street in Holliston north for a distance of almost one mile. The maximum width is about 0.50 mile. The land cover consists of mixed wood growth with small open spaces of grass. Dopping Brook is the boundary line between Holliston and Sherborn, so this area includes acreage in both towns.

The project land in Holliston is zoned industrial, agricultural, or residential. There is a gravel pit near the south end of the area, but the active mining operation is outside the proposed acquisition area. The Consolidated Rail Corporation's right of way (formerly Penn Central) runs through the area in a north-south direction.

It is noted that the town of Holliston is contemplating sinking a well within or near the recommended acquisition area. The proposed Brook Street well site is near the Holliston-Sherborn town line. Since a well of this nature requires a 400-foot radius sanitary area, it will necessitate acquisition of rights to land in the towns of Holliston and Sherborn which lie within the recommended acquisition area.

This well site has been approved by the Commonwealth of Massachusetts, as noted in a letter dated 3 November 1978 from Mr. George J. Coogan, P.E., Director, Division of Water Supply to the Holliston Board of Water Commissioners, where it states: "The Brook Street well site has been approved and all land within the town of Holliston will be acquired (400° radius). The additional land will be acquired by taking of easement by the Corps of Engineers, which land will remain it its natural state and provide adequate protection for this source of water supply." (See Exhibit 3C-6)

The flood plain in Holliston includes that land which is at or below 170° msl. (See Paragraph 10, Zoning) The guide taking elevation for lands in Holliston is 165° msl. On this basis all of Area "F" in Holliston is within the town flood plain restriction area.

The Sherborn portion of Area "J" is zoned residential. There are three Boston Edison Company power transmission lines and one underground Algonquin Gas company line running through the southeast corner of the subject area.

Like Areas "F" and "I" the only part of the Sherborn "J" area that is within the flood plain is that portion which lies 25 feet east of the centerline of Dopping Brook.

The only access to the area by public road is from Brook Street in Holliston. There are ll owners within the acquisition area.

10. ZONING

Zoning in the subject areas includes industrial, agricultural and residential. The majority of the subject lands are located within the flood plain districts or areas known as wetlands. Because of superimposed flood plain zoning and wetland restrictions over these areas, part of the proposed acquisition area is limited concerning permitted uses. In some cases however, the land may be developed by special appeal procedures. The following is a description of the zoning for each area:

AREA "F" is zoned for residential use. The flood plain in Sherborn, as described in the Zoning Bylaws, revised as of 1978 Town Meeting, states the following:

"Location of Flood Plain District
The location of the Flood Plain District is shown on a map
entitled "Flood Plain District Map of the Town of Sherborn 1970,"
which is filed with the Town Clerk of Sherborn and hereby is made
a part of the Zoning Map of the Town of Sherborn and such district
shall include all those areas identified on such map and
specifically described as follows:

- a. All that land along or sloping towards the Charles River (including Sewall Brook to Forest Street) from the Sherborn-Millis Town Line north to the Sherborn-Natick Town Line that is at or below 125.0 feet msl.
- b. All that land along all streams and brooks for a horizontal distance of 25 feet on each side of the centerline thereof.
- c. All that land bordering the major water bodies:

Farm Pond Little Farm Pond Duck Hollow Pond Nicolai's Pond Leland's Mill Pond

that lies within a horizontal distance of 25 feet from the normal high water line of said water bodies."

The proposed guide taking elevation is 139° msl. Since the flood plain zoning in this area only includes 25 feet each side of Sewall Brook for a portion of the designated area, the project taking is greater than the existing flood plain zoning.

AREA "I" is zoned for residential use. The flood plain zoning in this area is the same as in Area "F". The project taking in Area "I" is to 134° msl. According to the Zoning Bylaws the flood plain includes 25 feet each side of the centerline of Bogastow Brook; therefore the project taking is greater than the existing flood plain zoning.

AREA "J" is made up of an area along Dopping Brook, which is the dividing line between Holliston and Sherborn.

That area, which lies east of Dopping Brook, is in Sherborn and is zoned for residential use. Since the Sherborn Zoning Bylaws state that the flood plain only includes an area 25 feet each side of the centerline of Bogastow Brook, the proposed taking area is larger than the designated flood plain.

That area, which lies west of Dopping Brook, is in Holliston and is zoned industrial, agricultural, or residential.

The town of Holliston's Zoning Bylaws 1978 read in part as follows:

"Wetlands and Flood Plain Protection Zone.
Location - The locations and boundaries of the Wetlands and Flood Plain Protection Zone are shown on a map entitled 'Wetlands and Flood Plain Protection Zone, Holliston, Ma., 1975," consisting of forty-six sheets, which is hereby made a part of this bylaw and which is on file in the office of the Town Clerk and Inspector of Buildings."

Although it is not printed in the bylaws, it is reliably reported that the flood plain along Dopping Brook is equal to 170° msl. The proposed taking in Area "J" is 165° msl. Therefore, the

entire area would be within the town's flood plain restriction area.

11. ENVIRONMENTAL EVALUATION

An environmental evaluation has been conducted by NED Planning Division, Environmental Analysis Branch. As a result of that study, it was concluded that implementation of this land acquisition program will have no effect upon the environmental status of the areas involved, other than to provide protection against development of said lands. Acquisition of these wetlands, therefore, would have only a beneficial effect upon the Charles River Watershed Area. (See Subject "L," Paragraph 23.26, GDM, July 1976.) In compliance with the National Environmental Policy Act of 1969, a draft of the final version of the Environmental Impact Statement with comments was submitted to the President's Council on Environmental Quality on 14 August 1972. No adverse comments have been received.

12. WATER RIGHTS

Lands that are acquired in fee simple will include any pertinent water rights. Restrictive easements will not affect any riparian interests, which the owners may have in their properties and they will continue to enjoy access to the water and any other uses, which will not interfere with the terms of the easements.

13. MINERAL DEPOSITS AND CROPS

A field inspection of Areas "F," "I" and "J" revealed no commercial gravel mining, marketable stands of timber, agricultural crops or other minerals. If subsequent investigations disclose any active gravel mining property, it will not be acquired. The value of the timber is included in the value of the land in the wooded areas.

14. GOVERNMENT/MUNICIPAL-OWNED FACILITIES

No improved properties will be acquired for this project.

15. PROTECTION AND ENHANCEMENT OF CULTURAL ENVIRONMENT

In accordance with instructions set forth in teletype DA (DAEN) R 191306A, dated October 1971, Subject: "E011593, 13 May 1971, Protection and Enhancement of Cultural Environment;" a study has been made in the subject areas. The study revealed that no local, State, Federally owned, nor Federally-controlled property of historical significance would fall within the provisions of E0 11593.

16. ESTIMATED TAX LOSS

A review of the town tax assessment records of the properties to be acquired indicates that communities will incur some tax loss because of the proposed Federal acquisition. The amount of tax loss to the communities caused by the real estate takings of the wetlands for the towns within the Priority IV Areas is estimated as follows:

TABLE 1

TAXABLE LAND VALUATION - AREAS "F," "I" AND "J"

| | Estimated 1978 Tax | |
|----------|--------------------|--|
| | (Rounded) | |
| Area "F" | \$ 7,5 00 | |
| Area "I" | 4,900 | |
| Area "J" | 2,500 | |
| TOTAL | \$ 14,900 | |

TABLE 2

RECAPITULATIONS BY TOWNS

| | Estimated 1978 Tax |
|-----------|--------------------|
| | (Rounded) |
| Sherborn | \$ 12,700 |
| Holliston | 2,200 |
| TOTAL | \$ 14,900 |

Reimbursement under Massachusetts General Laws (Chapter 58, Section 178) entitled, "Property Taken for Flood Control, Loss of Taxes, Reimbursement," refers to reimbursement to towns for the loss in taxes, as a result of property taken for flood control purposes. Under Chapter 858, Section 5, Massachusetts Acts and Resolves of 1977, approved 23 December 1977, the provisions of Chapter 58, Section 178 of the General Laws apply to property taken for the Natural Valley Storage Project.

Public Law 94-565, 90 ST 2662, approved 20 October 1976, authorizes the Secretary of Interior to make payments on a fiscal

year basis to each unit of local government in which lands are dedicated to the use of water resource development projects of the United States. The amounts paid are based on amount of acreage of entitlement land, located within the boundaries of such unit of local government, and its total population. However, no funds may be made available for payment to the communities, except to the extent provided in advance in Appropriation Acts. Accordingly, this special law could mitigate tax losses incurred by Sherborn and Holliston.

The Federal and State Governments are presently making payments to local towns under provisions of these laws.

17. MANAGEMENT OF THE WETLANDS

The Division Engineer has requested from the Department of Environmental Management, Commonwealth of Massachusetts, assistance in establishing an advisory group to resolve questions concerning the use and management of the lands to be acquired. These questions involve compensation to towns for lands and taxes lost for the benefit of downstream communities, as well as the possibilities for passive recreational uses within the wetland areas. Under a contract with the New England Division, the Metropolitan Area Planning Council completed a report on the Management of the Project. Two plans of management were suggested, one of which would authorize the Commonwealth of Massachusetts, Division of Fisheries and Wildlife to be the Management Agent, and the other would suggest management by the affected towns under individual licenses with a common scheme. The Commonwealth of Massachusetts, Division of Fisheries and Wildlife, indicated its interest as a licensee for the Management of the project for fish and wildlife and passive recreational purposes. A license pertaining to approximately 493 acres of newly acquired land in the priority area has been prepared and presented to the Commonwealth for review. After the license has been issued additional land areas will be granted, when substantial acreage has been acquired.

18. HIGHEST AND BEST USE

Generally, the present uses of the lands located within the proposed project areas are considered to be their highest and best use. The areas affected by the proposed acquisition program are lowlands and wetlands that contribute to conservation and natural flood protection.

19. LAND COSTS

Land values have been estimated by the market data or comparable sales approach. This approach to value is premised

upon comparison between the property to be acquired and recent sales of comparable lands in the general vicinity. For purposes of this report, the gross land values presented in the project recapitulation of real estate costs were estimated on average unit values. Detailed appraisals will be made to estimate the value of each parcel for the interest to be acquired. Experience to date indicates that the loss in value caused by restrictive easements is considerably less than the fee value. For purposes of this report, loss in value caused by the imposition of a restrictive easement, is estimated to be nominal. These values have been estimated separately.

Land Costs (Fee and Restrictive Easements) \$321,500

20. AQUISITION COSTS

Area

Acquisition costs include mapping, survey, legal descriptions, title evidence, appraisals, negotiations, closings and administrative costs for possible condemnation. The number of ownerships in the proposed areas as of 15 May 1979, was derived from local assessor's maps, copies of deeds and from real estate tract maps. Ownerships and acquisition costs are estimated for each area and are summarized as follows:

| "F" | 22 Ownerships @ \$3,500 = | s 77,000 |
|------|----------------------------------|------------|
| "I" | 8 Ownerships @ \$3,500 | 28,000 |
| "J " | 11 Ownerships @ \$3,500 : | 38,500 |
| | 41 Ownerships | |
| | TOTAL ESTIMATED AQUISITION COSTS | \$ 143,500 |

21. RESERVATION BOUNDARY SURVEYS AND MARKINGS

Current regulations require the boundary marking of all Government Reservations. Based on the most recent contract issued by this office for this type of work, survey costs for marking the boundary lines of the subject areas are estimated at \$3,500 per mile.

| Area | <u>.</u> | |
|------|-------------------------------------------|----------|
| "F" | 4 Miles | \$14,000 |
| "I" | 5 Miles | 17,500 |
| "J " | 4 Miles | 14,000 |
| | TOTAL BOUNDARY, SURVEYS AND MARKING COSTS | \$45,500 |

22. RELOCATION ASSISTANCE

Public Law 91-646, Uniform Relocation Assistance and Real Property Act of 1970 provides for uniform and equitable treatment of persons displaced from their homes, businesses or farms by Federally or Federally Assisted programs. No displacement or relocation of property owners will occur, as improvements have been excluded from the proposed acquisition. Relocation assistance costs include mainly reimbursement of expenses incidental to transfer of title under Section 303 of the Act. These costs have been estimated for each area as follows:

Area

| "F" "I" "J" | 22 Ownerships @ \$250 = 8 Ownerships @ \$250 = 11 Ownerships @ \$250 = | \$ 5,500 2,000 2,750 |
|-------------------|------------------------------------------------------------------------|----------------------------|
| | TOTAL RELOCATION ASSISTANCE COSTS | \$10,250 |

23. SEVERANCE DAMAGES

Severance damages may occur where partial takings are acquired and when the remaining portion may be affected by the taking, and may not be subject to full economic development. The severance damages are measured and estimated on the basis of "Before and After" appraisal methods and will reflect actual losses incurred by remainders, as a result of partial acquisition. It is planned to follow good, sound real estate acquisition practices so that damages of this nature will be negligible. Based upon a study of the proposed takings, severance damages are considered to be minimal and for purposes of this report are estimated to be \$ -0-.

24. CONTINGENCIES

A contingency allowance of 20 percent is considered reasonable to provide for possible appreciation of property values from the date of this report to the acquisition date, for possible minor property line adjustments, hidden ownerships which may develop, adverse condemnation awards and to allow for actual, practical and realistic negotiations, pursuant to existing regulations.

25. REAL ESTATE COSTS SUMMARY

The following is a summary of the estimated real estate costs for the Charles River Watershed Natural Valley Storage area project.

| Priority Group IV Areas, "F," "I" a | ind "J" |
|-------------------------------------------------------------|-----------------|
| Land Costs | \$321,500 |
| (Fee and Permanent Restrictive Easements) Severance Damages | - 0- |
| SUBTOTAL | \$321,500 |
| Contingencies (20% of \$321,500) | 64,300 |
| Relocation Assistance (PL 91-646) | 10,250 |
| Acquisition Costs | 143,500 |
| Boundary Surveys and Markings | 45,500 |
| TOTAL ESTIMATED REAL ESTATE COSTS | \$585,050 |
| CALLED | \$585,000 |

26. LAND ACQUISITION SCHEDULE

Present plans call for initial real estate acquisition for Priority Group IV to commence in October 1979. The real estate public meeting is scheduled for September 1979 in Sherborn. Acquisition is planned to proceed as expeditiously as possible, following area priorities. Presently, invitations for bids for title evidence are being published and negotiations for survey contract are being conducted for Areas "F," "I" and "J."

27. RELOCATIONS

In accordance with our normal practice, properties will be acquired subject to existing easements for public roads and highways, public utilities, railroads, and pipelines. A preliminary investigation revealed that there were no cemeteries within the project areas. Since there is no construction authorized for this project, no relocations are contemplated.

28. TRACT REGISTER

Preliminary project real estate maps are complete. Bids for title evidence and surveys are in the invitation stage and contracts should be signed this month. It is expected that there could be some minor changes in property lines. Preliminary maps are included in this report for descriptive locations of the areas.

29. CONCLUSIONS AND RECOMMENDATIONS

The areas to be acquired, as set forth in this report, are considered to be reasonably accurate. The final determination of the lands to be acquired within the scope of the proposed land acquisition program will be predicated upon survey and detailed field investigations and careful studies of each ownership. Refinement or adjustment of the taking lines also will depend upon the best interests of the Government, sound real estate practices, topographic conditions and owners desires.

Project authorization does not include acquisition of buildings or other improvements situated within the subject areas, nor will access be denied to these improvements. During the real estate study, public records were reviewed and many knowledgeable persons including rown officials and personnel from the Massachusetts Division of Environmental Management were contacted and interviewed. Many sales of properties, considered comparable to the lands affected by the proposed acquisition, were noted and compared to the subject sites.

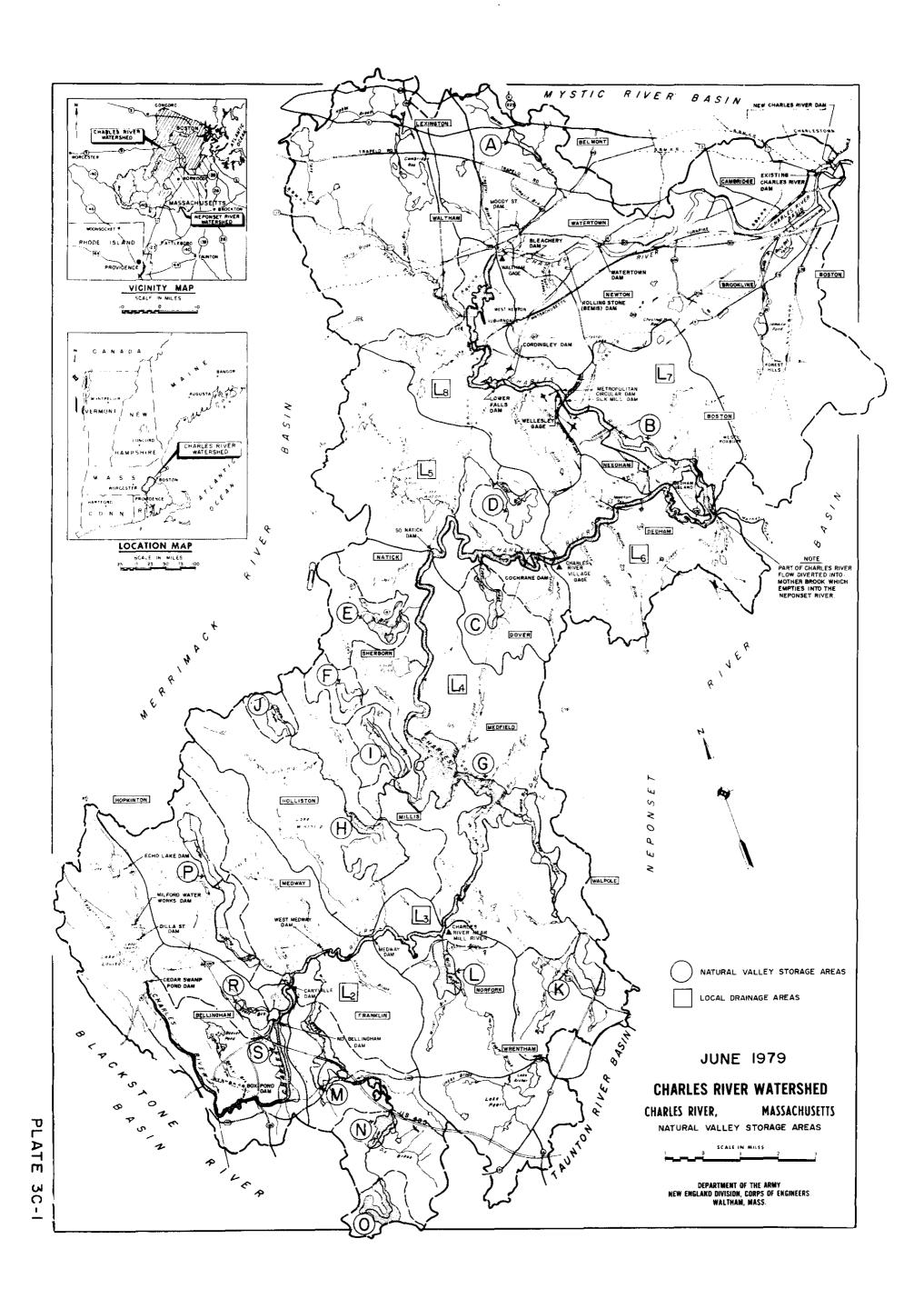
The real estate study and investigation included on-site inspection of each of the three subject areas to determine the type of lands involved, physical characteristics and their highest and best use. Consideration was given to all items which might have an influence on the final real estate costs.

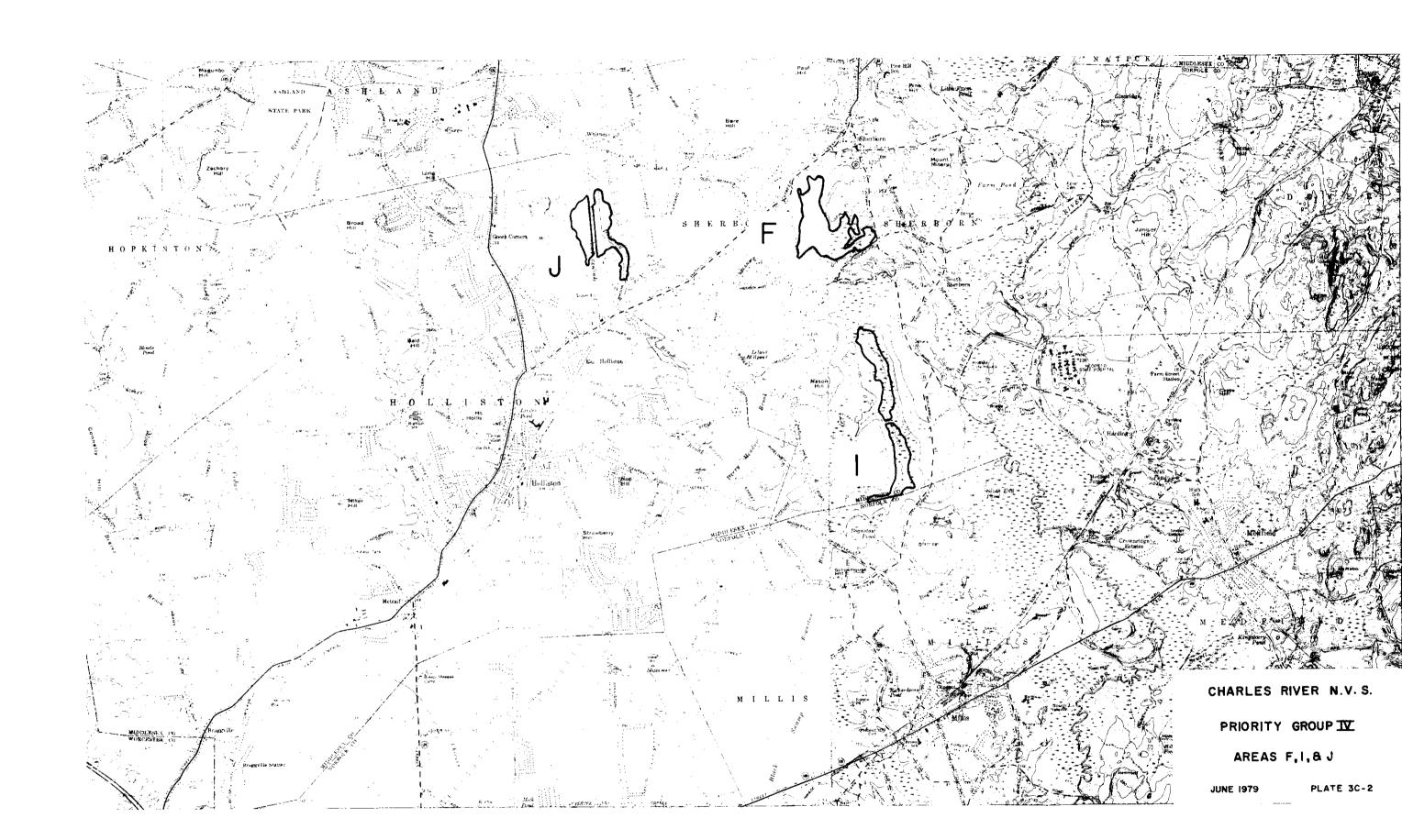
As a result of the foregoing, it is estimated that the total real estate cost for Priority Group IV is:

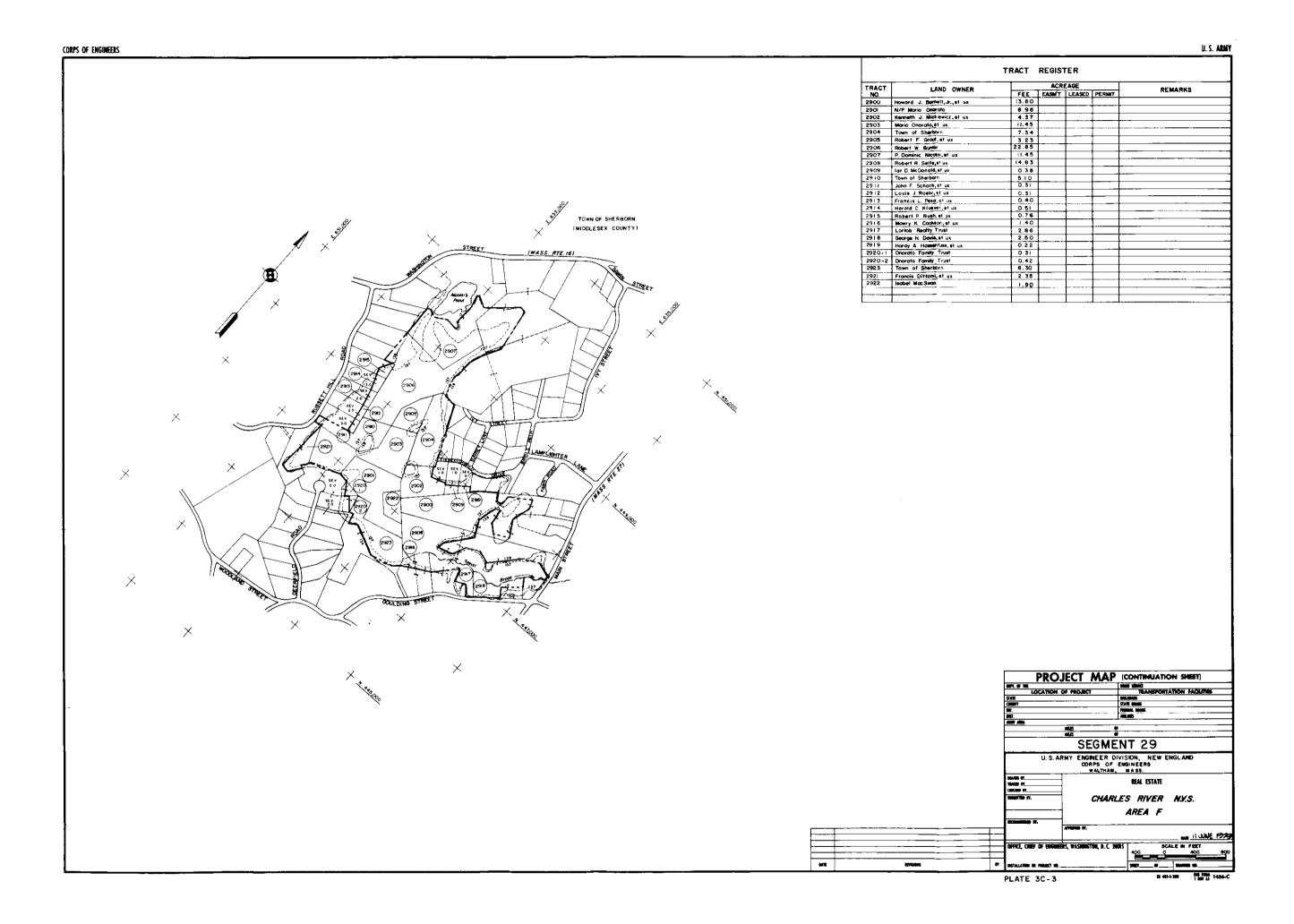
Five Hundred Eighty-Five Thousand Dollars \$585,000

The lands included in this group comprise approximately 4 percent of the total project and about 8 percent of all ownerships.

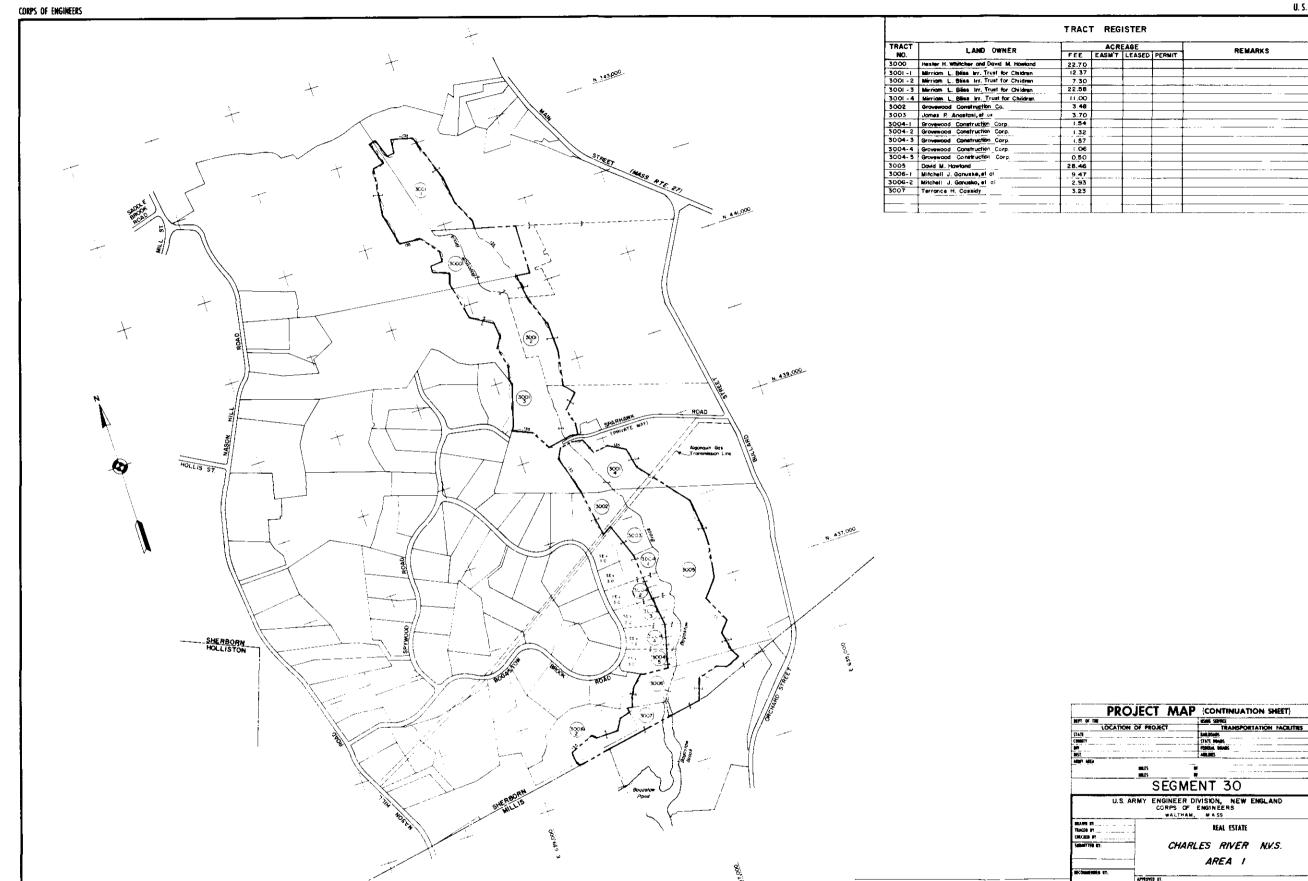
It is recommended that this report to acquire said lands as authorized be approved, subject to possible changes and minor variations, as determined necessary, prior to acquisition.



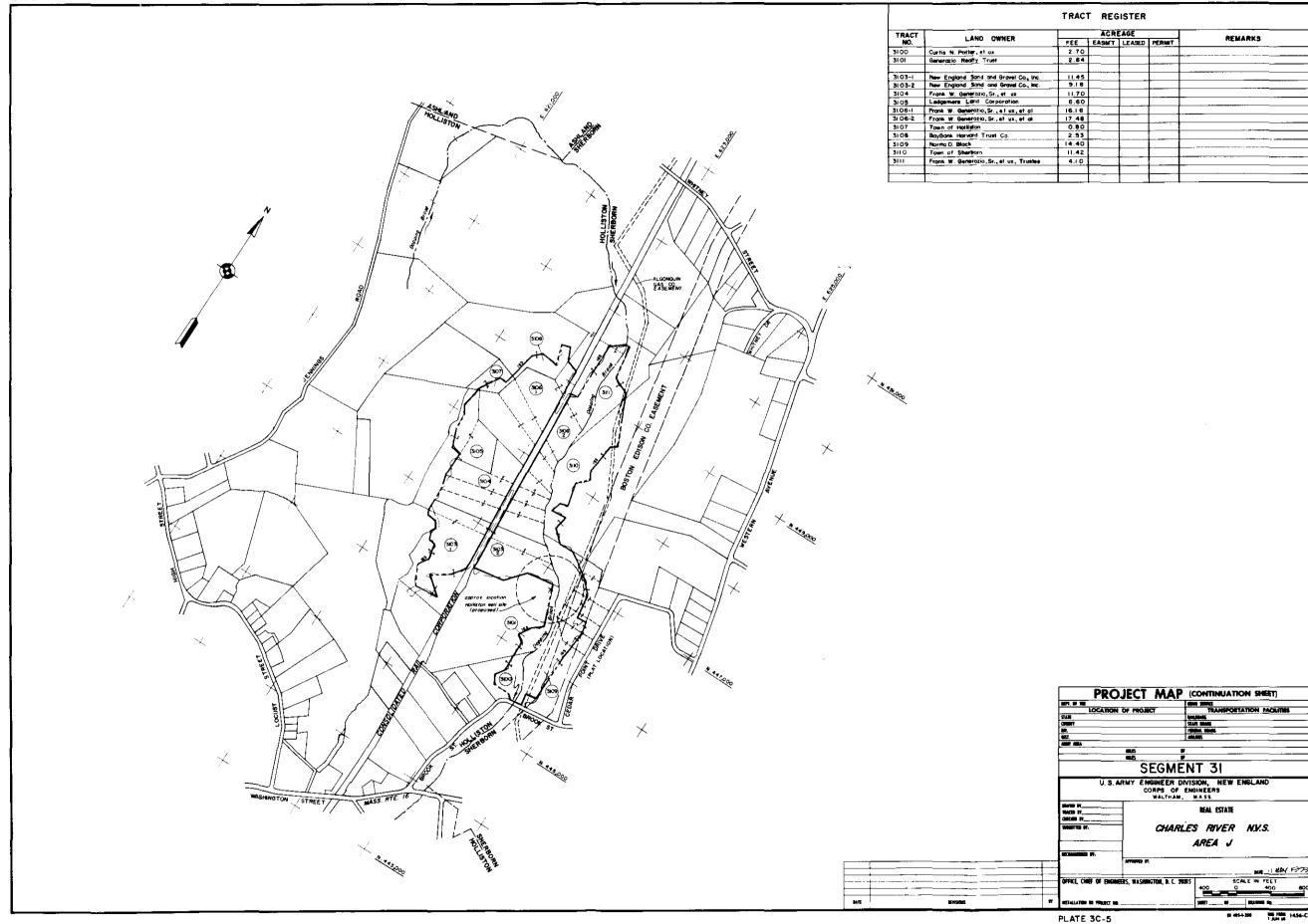




U.S. ARMY



SCALE IN FEET





The Commonwealth of Massachusetts

Executive Office of Environmental Affairs

Department of Environmental Quality Engineering

600 Washington St.

100 Kinnbridger Floret. Boston 155165

November 3, 1978

Holliston Board of Water Commissioners Holliston, Massachusetts 01746

RE: HOLLISTON - Water Supply

Gentlemen:

At a meeting in this office with your Board, a representative of the Corps of Engineers and a representative of Whitman & Howard, Inc., Engineers and Architects, it was agreed that the new test well site (78-3) would be acceptable for a permanent source of ground water supply pending the pumping test. The town would acquire all land within 400 ft. of the well except the Penn Central Railroad land easement.

The Brook Street well site has been approved and all land within the Town of Holliston will be acquired (400' radius). The additional land will be acquired by taking or easement by the Corps of Engineers which land will remain in its natural state and provide adequate protection for this source of water supply.

If you have any additional questions, please call or write.

Very truly yours, For the Commissioner

George J. Coogan, P.E.

Division of Water Supply

C/E/sk

c.c. - Board of Health- Holliston
 Whitman & Howard - Wellesley
 Corps of Engineers - Waltham
 Representative Natsios - State House

PLATE 3C - 6

13/18